IN THE ABSTRACT:

The invention relates to an array microphone with several individual microphones (1-4) connected with a signal processor (11) that for each individual microphone, comprises at least one digital filter, in particular for voice recognition. The invention is characterized in that at least one loudspeaker (5) is provided, which is arranged in the acquisition area range of each of the individual microphones (1-4), in that an electronic circuit is provided, which applies a signal to the loudspeaker (5) in such a manner that it emits a predetermined periodic noise signal, and in that the signal processor (11) evaluates the response signals coming from each of the microphones and/or from each of the digital filters as a response to the reception of the periodic noise signal.